

The Examiner pointed out that Walker et al. disclose selecting a work item for a resource by determining available work items needing skills possessed by the resource and determining a business value of having the resource serve the work item. The Examiner admitted that Walker et al. do not disclose determining a value to a work item of being serviced by a resource and selecting a work item that has a best combined value of business value and value to the work item. She attempted to gloss over this fundamental failure of Walker et al. to disclose the claimed invention by arguing that "it is common in the art that the value of the work item being serviced by the resource is highest when the most qualified resource is assigned to the work item. For example, a task that needs a plumber would place the highest value on the expertise of the resource, or technician, assigned to fixed (sic) the plumbing. Therefore, it would be obvious to one of ordinary skill in the art to determine the value of (sic) the work item and select the best combined business and work item value to the job."

The Examiner's argument is flawed. Choosing only plumbers to do plumbing jobs involves choosing resources that have the skills needed to do the jobs. Similarly, choosing only plumbing jobs for plumbers involves choosing jobs that need the resources' skills. This corresponds to applicant's independent claims' recitations of "determining available work items [e.g., jobs], that need skills possessed by the resource" and "determining a business value of having the resource serve the work item, the business value being a measure of qualification of the resource for servicing of the work item based on skills of the resource and skill requirements of the work item." The claims' recitation of "for each of the determined work items, determining a value to the work item of being serviced by the resource" is a separate, additional, requirement for which there is no equivalent in Walker et al.

But let us assume for purposes of argument that the Examiner's assertion of correspondence between "a value to the work

item of being serviced by the resource” and assigning the most qualified resource to the work item is valid. This assertion still does not address the claims’ explicit definition of what constitutes “value to the work item.” The independent claims explicitly recite that “the value to the work item [is] a measure of how the work item is treated compared to other work items, and treatment goals of the individual work item.” The Examiner did not indicate where a corresponding teaching may be found in Walker et al. And, indeed, Walker et al. have no corresponding teaching. It is not seen how assigning the most qualified resource to the work item can be interpreted to correspond either to a measure of how the work item is treated compared to other work items or to treatment goals of the individual work item, much less to both. The Examiner has provided no such showing or explanation. Consequently, the Examiner has failed to make a *prima facie* case for Walker et al. disclosing, teaching, or suggesting the claimed invention.

The Examiner’s assertions of correspondence between the recitations of the dependent claims and the teaching of Walker et al. are likewise not well founded.

Claim 14 recites using a business value weight and a work item value weight, both corresponding to the work item, to weigh the business value and the value to the work item. The Examiner asserted that Walker et al. disclose weighted values at col. 7, lines 35-59. The Examiner is mistaken. The referenced passage of Walker et al. does not disclose, teach, or suggest any weighting at all.

But even if Walker et al. do suggest the use of weighted values in general, it is still not seen how Walker et al. can be interpreted to suggest weighting the business value and the value to the work item each by its own weight and both of which weights correspond to the work item, as required by claim 14. Unless such specific disclosure, teaching, or suggestion can be found in Walker et al., Walker et al. cannot be said to render claim 14 unpatentable.

Claim 15 further defines a weighted business value as “a product of (a) the business value weight corresponding to the work item, and (b) a sum of products of a level of each of said needed skill of the resource and a weight of said needed skill of the work item.” The Examiner asserted that such teaching may be found in Walker et al. at col. 7, lines 11-24. This passage merely states that factors such as the ability of the technician to perform the job and the amount of non-productive technician time can be taken into account and weighted for probability. It is not seen how this disclosure teaches or suggests either the particular parameters, or the particular computation using those parameters, that are recited in claim 15. For example, applicant respectfully asserts that Walker et al. do not disclosure, teach, or suggest either skill levels or skill weights, or the weighting of the sum of the products thereof. If the Examiner continues to believe otherwise, she is requested to point out with particularity the correspondence between the claim’s exact parameters and computations and the disclosure of Walker et al.

Claim 15 further defines a weighted work item treatment value as “a product of (c) a work item treatment weight corresponding to the work item and (d) a sum of products of each treatment of the work item and a weight of said treatment of the work item.” The Examiner again mysteriously found this suggested in Walker et al. at col. 7, lines 11-24. Applicant’s answer thereto is the same as with respect to the computation of the weighted business value, above.

Claim 16 further recites that the sums of products recited in claim 15 are scaled sums and that the treatments are scaled treatments. The Examiner admitted that Walker et al. lack such teaching, but asserted that “scaling sums” are disclosed by Walker et al. at col. 7, lines 11-24. Applicant fails to find any such teaching in the cited passage, and requests the Examiner to point out with particularity where “scaling sums” are disclosed in that passage and where application of this concept to

sums of products of skill levels and skill weights and to work-item treatments is suggested anywhere by Walker et al.

Claim 17 recites that selecting a work item in claim 16 comprises selecting the work item that has a highest sum of the weighted business value and the weighted work item treatment value. Since it has been shown above that Walker et al. do not disclose the computation of the weighted business value and the weighted work item treatment value as defined by the base claims, it is not seen how Walker et al. can be deemed to disclose a selection based on the sum of these non-existent values.

Claim 20 defines a particular formula for the estimated wait time that a work item will have to wait for service. The wait time is defined as "a product of (a) a ratio of a total number of work items waiting for service and an average number of work items waiting for service, and (b) a sum of average wait times of individual said needed skills each weighted by a ratio of the weight of said individual skill and a sum of the weights of the needed skills." The Examiner purported to find a corresponding teaching in Walker et al. at Fig. 16, col. 6, lines 53-63, and col. 7, lines 11-24 and 35-59. This figure and passages describe a time-dependent cost function for each job that takes into account the penalty for failing to meet an agreed time, the ability of the technician to perform the job, a weighting of the costs for probability, and the selection of a lowest-cost function from among possible technician-and-job combinations. But it fails to disclose (1) a ratio of total and average numbers of waiting jobs, (2) average wait times of individual needed skills, (3) weights of individual skills, (4) a sum of (3)s, (5) ratios of (3)s and (4), use of (5) as weights for (2), (6) a sum of (5)s, and (7) a product of (1) and (6). Walker et al. thus cannot be said to disclose, teach, or suggest claim 20.

Claims 21 and 30 recite that for each available work item that needs skills possessed by a resource, the business value is determined as "a sum across all skills of a product of a skill level of the resource in the

skill and skill weight of the work item for the skill.” The Examiner purported to find a corresponding disclosure in Walker et al. at col. 7, lines 11-24. The Examiner is mistaken. As was pointed out previously, this passage merely states that factors such as the ability of the technician to perform the job and the amount of non-productive technician time can be taken into account and weighted for probability. Walker et al. in general, and this passage in particular, fail to disclose, teach, or suggest resource skill levels for skills, skill weights of the work items for skills, the products thereof, and the sums of these products. The Examiner’s assertion that “every resource [of Walker et al.] contains a skill level and is weighted according to this skill level when combined with a work item” is wholly unfounded.

Claim 21 further defines the work item treatment value as “being a measure of how the work item is treated compared to other work items and treatment goals of the individual work item.” The failure of Walker et al. to disclose, teach, or suggest this matter was already described above in conjunction with claim 13.

Claim 21 further recites that, for each available work item that needs skills possessed by a resource, the work item treatment value is determined as “a sum across all work item treatments of a product of the value of the work item for the work item treatment and a weight of the work item for the work item treatment.” The Examiner purported to find teaching thereof to flow from the knowledge of the art that “the value to the work item being serviced by the resource is highest when the most qualified resource is assigned to the work item.” The Examiner’s view is unfounded. The failure of this “knowledge” to correspond to the concept of “work item treatment value” has already been pointed out in conjunction with claim 13. But even if this knowledge were assumed, for purposes of argument, to correspond to the work item treatment value, it, or any teaching in Walker et al., still fails to disclose, teach, or suggest work items’ values for work item treatments, work items’ weights for work item

treatments, products of the two, and a sum across the work item treatments of these products. In other words, claim 21 defines a particular formula for computing work item treatment values, which formula is not disclosed, taught, or suggested in the prior art.

Claim 22 recites particular work item treatments. Since the prior art fails to disclose, teach, or suggest the formula of claim 21 for computing work item treatment values, it cannot be said to suggest the use of particular work item treatments in this non-existent formula.

Claim 23 recites three different scaling factors and the application thereof to the computation of business value and work item treatment value. The Examiner pointed out that teaching of scaling of values (weighting for probability) may be found in Walker et al., and in combination with the assertion that "the value to the work item being serviced by the resource is highest when the most qualified resource is assigned to the work item," arrived at the conclusion that claim 23 is obvious. The conclusion does not follow from the premise. None of the three weighting factors recited in claim 23 are a weighting for probability. How, then, can Walker et al. suggest those three weighting factors? Applicant respectfully suggests that Walker et al. cannot do so.

Claim 27 depends in part from claims 13-24, and therefore the arguments made above with respect to the non-obviousness of claims 13-24 apply equally to claim 27.

Claims 30, 34, and 48 have claim 13 as their method equivalent. The same arguments made above with respect to the non-obviousness of claim 13 apply equally to claims 30, 34, and 48.

Claims 31, 35, and 56 have claim 21 as their method equivalent. The same arguments made above with respect to non-obviousness of claim 21 apply equally to claims 31, 35, and 56.

Claims 14-20 are equivalent to claims 49-55, respectively. The same arguments made above with respect to the non-obviousness of claims 14-20 therefore apply equally to respective claims 49-55.

Finally, claims 22-24 are equivalent to claims 57-59, respectively. The same arguments made above with respect to the non-obviousness of claims 22-24 therefore apply equally to respective claims 57-59.

In view of the above remarks, applicant respectfully suggests that it has been amply shown that Walker et al. do not render claims 13-24, 27, 30-31, 34-35, and 48-59 obvious. Applicant therefore respectfully requests that the Section 103(a) rejection of these claims based on Walker et al. be withdrawn.

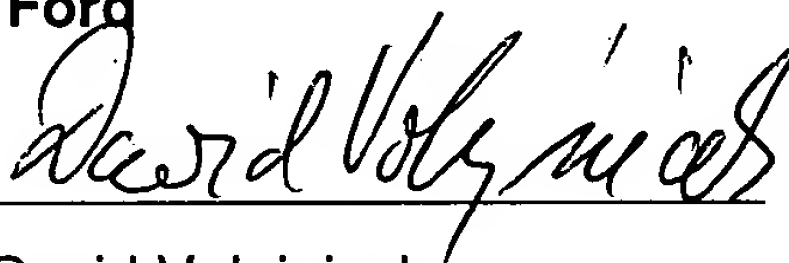
The Examiner's rejections having been properly addressed and disposed of, applicant respectfully asserts that the application is now in condition for allowance. Applicant therefore requests that the application be reconsidered and thereafter be passed to issue.

Although the foregoing is believed to be dispositive of all issues in the application, if the Examiner deems that a telephone interview would advance prosecution, she is invited to call applicant's attorney at the number listed below.

Respectfully submitted,

J.A. Ford

By



David Volejnicek
Corporate Counsel
Reg. No. 29355
303-538-4154

Date: _____

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Avaya Inc.
Docket Administrator
307 Middletown-Lincroft Road
Room 1N-391
Lincroft, NJ 07738